

ABSTRACT OF THE DISCLOSURE

Sulphur control in fluidized bed combustion systems often involves adding a source of calcium to the combustor so that the calcium may combine with the sulphur. Ash resulting from such combustion often contains a significant amount of calcium which does not combine with the sulphur compounds. This invention teaches a method of reactivating that ash by grinding the ash in a positive transport grinding mill with water. The grinder causes the ash to simultaneously undergo grinding and hydration to convert the calcium to calcium hydroxide. Advantageously drying agents are added to the ground hydrated ash after grinding to facilitate the formation of acceptably crumbly pellets thereby increasing the amount of calcium available to react with the sulphur. A particularly advantageous aspect of the invention involves the use of wet coal slurries which are otherwise waste products as the source of water to be ground with the ash. The coal content of the slurry then forms additional fuel for the combustion process. This converts a formerly waste product into a valuable, usable resource.